FORM PTO-1449

APPLICANT'S INFORMATION DISCLOSURE

STATEMENT

ATTY. DOCKET NO. 37851-922	SERIAL NO. 10/658,834	CONFIRM NO. 7681
APPLICANT GANTIER et al.	CUSTOMER N 24961	,
FILING DATE September 8, 2003	GROUP 1644	

PTO in a prior application that is identified in the statement and relied upon for an earlier filing date under 35 U.S.C. 120. 37 C.F.R. § 1.98(d).

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	*Ref. Code		D	OCUN	IENT N	NUMB	ER		DATE	NAME	CLASS	SUB CLASS	FILING DATE
/EGS/	Α	0	1	2	9	2	0	3	07/10/03	Vega <i>et al.</i>	424	233.1	12/17/01
	В	0	1	2	9	5	8	4	07/10/03	Vega	435	5	12/13/00
	С	0	1	3	4	3	5	1	07/17/03	Vega <i>et al.</i>	435	69.1	12/17/01
	D	0	1	7	5	6	9	4	09/18/03	Vega	435	5	05/04/01
	E	3	2	2	4	4	0	4	12/04/03	Vega et al.	435	6	02/24/03
	F	4	0	4	4	1	2	6	08/23/77	Cook et al.	424	243	07/09/76
•	G	4	3	6	4	9	2	3	12/21/82	Cook et al.	424	46	04/30/81
	H	4	4	1	4	2	0	9	11/08/83	Cook et al.	424	243	06/13/77
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FOREIGN PATENT DOCUMENTS

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/Elly Gerald Stoica/

DATE CONSIDERED

03/15/2007

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Title: RATIONAL EVOLUTION OF CYTOKINES FOR HIGHER STABILITY, THE CYTOKINES AND ENCODING NUCLEIC ACID MOLECULES

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ATTY, DOCKET NO. SERIAL NO. CONFIRM NO. **FORM PTO-1449** 37851-922 10/658,834 7681 CUSTOMER NO. APPLICANT ESTAPF PATENTS AND PUBLICATIONS FOR GANTIER et al. 24961 APPLICANT'S INFORMATION DISCLOSURE **STATEMENT GROUP FILING DATE** September 8, 2003 1644

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X + = An English Language Equivalent Is provided.

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

/E	GS/	a	Bellido et al., "The phospholipid and fatty acid composition of skeletal muscle cells during culture in the presence of vitamin D-3 metabolites," <i>Biochim Biophys Acta</i> , 922(2):162-169 (1987)
		R	Biron et al., "Natural Killer Cells In Antiviral Defenses: Function and Regulation by Innate Cytokines," <i>Annu. Rev. Immunol.</i> , <u>17</u> :189-220 (1999)
	-	Ø	Boger et al., "Surface Probability Profiles. A Heuristic Approach to the Selection of Synthetic Peptide Antigens," Reports of the Sixth International Congress in Immunology, p. 250 (1986)
		Т	Briand et al., "Impact of the lysine-188 and aspartic acid-189 inversion on activity of trypsin," FEBS Lett., 442(1):43-47 (1999)
		U	Dayhoff et al., "A Model of Evolutionary Change in Proteins," Atlas of Protein Sequence and Structure, 5(3):345-352 (1978)
		٧	Diaz et al., "Nomenclature of the Human Interferon Genes," J. Interferon Cytokine Res., 16:179-180 (1996)
		w	Drittanti et al., "Effects of 1,25-difydroxyvitamin D-3 on phospholipid metabolism in chick myoblasts, Biochim Biophys Acta., 962(1):1-7 (1988)
	/	×	Drittanti et al., "Changes in muscle lipid metabolism induced in vitro by 1,25-dihydroxy-vitamin D-3, Biochim Biophys Acta, 918(1):83-92 (1987)

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P ESTOF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE	APPLICANT GANTIER et al.	CUSTOMER NO. 24961		
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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

/EGS/	Y	Drittanti et al., "Involvement of the 3',5'-cyclic AMP pathway in the induction of calmodulin synthesis in myoblasts by 1,25(OH)2-vitamin D3," Biochim Biophys Res Commun., 192(2):886-892 (1993)
	Z	Drittanti et al., "Modulation of DNA synthesis in cultured muscle cells by 1,25-dihydroxyvitamin D-3," Biochim Biophys Acta., 1014(2):112-119 (1989)
	AA	Drittanti et al., "Stimulation of calmodulin synthesis in proliferating myoblasts by 1,25-dihydroxy-vitamin D3," <i>Mol Cell Endocrinol.</i> , 74(2):143-153 (1990)
	АВ	Drittanti et al., "Optimised helper virus-free production of high-quality adenoassociated virus vectors," <i>J Gene Med.</i> , 3(1):59-71 (2001)
	AC	Drittanti et al., "Cystic fibrosis: gene therapy or preventive gene transfer?" Gene Ther., 4(10):1001-1003 (1997)
	AD	Drittanti <i>et al.</i> , "High throughput production, screening and analysis of adenoassociated viral vectors," <i>Gene Ther.</i> , 7(11):924-929 (2000)
	AE	Du et al., "Efficient transduction of human neurons with an adeno-associated virus vector," Gene Ther 3:254-261 (1996)
	AF	Feng et al., Aligning Amino Acid Sequences: Comparison of Commonly Used Methods," J. Mol. Evol., 21:112-125 (1985)
	. AG	Fitch, "An Improved Method of Testing for Evolutionary Homology," <i>J. Mol. Evol.</i> , 16(1):9-16 (1966)
	АН	Gibrat et al., "Surprising similarities in structure comparison," Current Opinion in Structural Biology, 6:377-385 (1995)
	Al	Gonnet et al., "Exhaustive Matching of the Entire Protein Sequence Database," Science, 256:1433-1445 (1992)
$\overline{\bigvee}$	AJ	Grantham, "Amino Acid Difference Formula to Help Explain Protein Evolution," Science, 185:862-864 (1974)

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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

/EGS/	AK	Grantier et al., "The L392V mutation of presentiin 1 associated with autosomal dominant early-onset Alzheimer's disease alters the secondary structure of the hydrophilic loop," Neuroreport, 10(14):3071-3074 (1999)
	AL	Grantier et al., "The pathogenic L392V mutation of presentiin 1 decreases the affinity to glycogen synthase kinase-3 beta," <i>Neurosci Lett.</i> , 283(3):217-220 (2000)
1	AM	Guyon et al., "Regulation of acetylcholine receptor alpha subunit variants in human myasthenia gravis. Quantification of steady-state levels of messenger RNA in muscle biopsy using the polymerase chain reaction," J Clin Invest., 94(1):16-24 (1994)
	AN	Guyon et al., "Regulation of acetylcholine receptor gene expression in human myasthenia gravis muscles. Evidences for a compensatory mechanism triggered by receptor loss," J Clin Invest., 102(1):249-263 (1998)
	AO	Henikoff et al., "Amino acid substitution matrices from protein blocks," Proc. Natl. Acad. Sci. USA, 89:10915-10919 (1992)
	АР	Hibbert et al., "Human Type 1 Inderferons Differ Greatly in Their Effects on the Proliferation of Primary B Cells," J. Interferon Cytokine Res., 19:309-318 (1999)
	AQ	Hoedemaekers et al., "Differential susceptibility of young and old rat neuromuscular junctions to antibody-mediated AChR degradation in experimental autoimmune myasthenia gravis," <i>Ann N Y Acad Sci.</i> , <u>841</u> :550-554 (1998)
4.2	AR	Hoedemaekers <i>et al.</i> , "Role of target organ in determining susceptibility to experimental autoimmune myasthenia gravis," <i>J Neuroimmunol.</i> , <u>89(1-2)</u> :131-141 (1998)
	AS	Holm et al., "Mapping the Protein Universe," Science, 273:595-602 (1996)
	AT	IUPAC-IUB "Commission on Biochemical Nomenclature Abbreviated Nomenclature of Synthetic Polypeptides (Polymerized Amino Acids)," <i>Biochem.</i> , <u>11</u> :942-944 (1972)
$\sqrt{}$	AU	IUPAC-IUB "Commission on Biochemical Nomenclature A One-Letter Notation for Amino Acid Sequences Tentative Rules", <i>J. Biol. Chem.</i> , 243(13):3557-3559 (1968)

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E UST OF PATENTS AND PUBLICATIONS FOR APPRICANT'S INFORMATION DISCLOSURE	APPLICANT GANTIER et al.				
STATEMENT	FILING DATE September 8, 2003	GROUP 1644			

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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

/EGS/	AV	Johnson <i>et al.</i> , "A Structural Basis for Sequence Comparisons. An Evaluation of Scoring Methodologies," <i>J. Mol. Biol.</i> , <u>233</u> :716-738 (1993)
	AW	Jones et al., "The rapid generation of mutation data matrics from protein sequences, Comput. Appl. Biosci., 8:275-282 (1992)
	AX	Lu, G., "TOP: a new method for protein structure comparisons and similarity searches," <i>J. Appl. Cryst.</i> , 33:176-189 (2000)
	AY -	Marrack et al., "Type I Interferons Keep Activated T Cells Alive," J. Exp. Med., 189:521-530 (1999)
	AZ	Masciovecchio et al., "The interactivity between the CFTR gene and cystic fibrosis' would be limited to the initial phase of the disease," Genet Med., 2(2):124-130 (2000)
	ВА	McLachlan, "Tests for Comparing Related Amino-acid Sequences. Cytochrome c and Cytochrome c_{551} ," J. Mol. Biol., <u>61</u> :409-424 (1971)
	BB	Miyata, "Two Types of Amino Acid Substitutions in Protein Evolution," J. Mol. Evol. 12:219-236 (1979)
	вс	Morikawa et al., "Recombinant interferon- α , - β and - γ enhance the proliferative response of human B cells," <i>J. Immunol.</i> , 139:761-766 (1987)
	BD	Moulian et al., "Respective role of thymus and muscle in autoimmune myasthenia gravis," Ann N Y Acad Sci., 841:397-406 (1998)
	BE	Murzin et al., "SCOP: A Structural Classification of Proteins Database for the Investigation of Sequences and Structures," J. Mol. Biol., 247:536-540 (1995)
	BF	Orengo et al., "CATH - a hierarchic classification of protein domain structures," Structure, 5(8):1093-1108 (1997)
$\sqrt{}$	BG	Pestka et al., "Interferons and Their Actions," Annu. Rev. Biochem., 56:727-777 (1987)

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FORM PTO-1449 10 9 2000	ATTY. DOCKET NO. 37851-922	SERIAL NO. 10/658,834	CONFIRM NO. 7681
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE	APPLICANT GANTIER et al.	CUSTOMER I 24961	NO.
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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

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/E0	SS/	вн	Piehler et al., "New Structural and Functional Aspects of the Type I Interferon-Receptor Interaction Revealed by Comprehensive Mutational Analysis of the Binding Interface," J. Biol. Chem., 275:40425-40433 (2000)
		ВІ	Poea et al., "Modulation of acetylcholine receptor expression in seronegative myasthenia gravis," Ann Neurol., 48(5):696-705 (2000)
		BJ	Poëa et al., "Expression of ciliary neurotrophic factor receptor in myasthenia gravis," J Neuroimmunol., 120(1-2):180-189 (2001)
		вк	Rao, "New scoring matrix for amino acid residue exchanges based on residue characteristic physical parameters," <i>J. Pept. Protein Res.</i> , <u>29</u> :276-281 (1987)
		BL	Raux et al., "The -2 bp deletion in exon 6 of the 'alpha 7-like' nicotinic receptor subunit gene is a risk factor for the P50 sensory gating deficit," Mol Psychiatry, 7(9):1006-1011 (2002)
		BM	Raux et al., "A novel presentiin 1 missense mutation (L153V) segregating with early-onset autosomal dominant Alzheimer's disease," <i>Human Mutat.</i> , Report #134, two pages (2000)
		BN	Raux et al., "Dementia with prominent frontotemporal features associated with L113P presenilin 1 mutation," <i>Neurol.</i> , <u>55(10)</u> :1577-1578 (2000)
		ВО	Risler et al., "Amino Acid Substitutions in Structurally Related Proteins A Pattern Recognition Approach," J. Mol. Biol., 204:1019-1029 (1988)
		ВР	Robert et al., "Interferon Induces Proliferation In Leukemic And Normal B-Cell Subsets," Hematol. Oncol., 4:113-120 (1986)
		BQ	Roisman et al., "Structure of the interferon-receptor complex determined by distance constraints from double-mutant cycles and flexible docking," <i>Proc. Natl. Acad. Sci. USA</i> , 98:13231-13236 (2001)
	/	BR	Sali et al., "Definition of General Topological Equivalence in Protein Structures," J. Mol. Biol., 212:403-428 (1990)

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LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE	APPLICANT GANTIER et al.			
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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

/E0	GS/	BS	Sanchez et al., "Spastic paraplegia and primary adrenal insufficiency: a case of adrenomyeloneuropathy," <i>Medicina (B Aires)</i> , 48(3):290-296 (1988) (Summary in English)
		ВТ	Scheel-Toeller et al., "Inhibition of $\frac{1}{4}$ T cell apoptosis by IFN- β rapidly reverses nuclear translocation of protein kinase C- δ ," Eur. J. Immunol., 29:2603-2612 (1999)
		BU	Shindyalov et al., "Protein structure alignment by incremental combinatorial extension (CE) of the optimal path," <i>Protein Engineering</i> , 11(9):739-747 (1998)
		BV	Smith et al., "Single-step purification of polypeptides expressed in Escherichia coli as fusions with glutathione S-transferase," Gene, 67:31-40 (1988)
		BW	Stark et al., "How cells Respond to Interferons," Annu. Rev. Biochem., 67:227-264 (1998)
	/	вх	Wakkach <i>et al.</i> , "Expression of acetylcholine receptor genes in human thymic epithelial cells: implications for myasthenia gravis," <i>J Immunol.</i> , <u>157(8)</u> :3752-3760 (1996)

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LIST OF PATENTS AND PUBLICANT'S INFORMATION DISCLOSURE STATEMENT

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FOREIGN PATENT DOCUMENTS

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	/EGS/	E	9	8	3	2	8	8	0	07/30/98	PCT				

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

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⁺ Derwent English language abstract and/or English translation provided.

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Substitute Form PTO-149 (Modified)

U.S. Bepartment of Commerce Patent and Trademark Office

Attorney's Docket No. 17109-012001 / 922

Application No. 10/658,834

Applicant

List of Patents and Publications for Applicant's Information Disclosure Statement

Rene Gantier et al.
Filing Date

September 8, 2003

Group Art Unit 1646

(37 CFR §1.98(b))

U.S. Patent Documents

_	U.S. Patent Documents											
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate					
/EGS/	AA	3,171,820	03/02/65	Volz et al.	521	61	02/17/64					
/FGS/	AB	5,223,409	06/29/93	Ladner et al.	435	69.7	03/01/91					
/EGS/ /EGS/	AC	6,013,478	01/11/00	Wells et al.	435	69.1	06/24/98					
/EGS/	AD	6,171,820	01/09/01	Short	435	69.1	02/04/99					
/EGS/	AE	2003/0224404	12/04/03	Vega et al.	435	6	02/24/03					

	Foreign Patent Documents or Published Foreign Patent Applications											
Examiner	Desig.	Document	Publication	Country or			Trans	lation				
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No				
/EGS/	AF	01/61344	08/23/01	PCT								
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/EGS/	AH	04/022747	03/18/04	PCT		,						
/EGS/	AI	04/022593	03/18/04	PCT								
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	Other Documents (include Author, Title, Date, and Place of Publication)								
Examiner Initial	Desig. ID	≰ Document							
/EGS/	AK	Kuhn "Structural basis for the positional specificity of lipoxygenases" Prostaglandins and other lipid mediators 62(3): 255-270 (2000)							
/EGS/	AL	Lewerenz et al. "Shared receptor components but distinct complexes for alpha and beta interferons" J. Mol. Biol. 282(3): 585-599 (1998)							
/EGS/	АМ	Manetti et al. "Design and realization of a tailor-made enzyme to modify the molecular recognition of 2-arylpropionic esters by Candida rugosa lipase" Biochem. Biophys. Acta 1543(1): 146-158 (2000)							

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Attorney's Docket No. 17109-012001 / 922 Application No. 10/658,834

Publications for Applicant's Disclosure Statement

Applicant Rene Gantier, et al.

Filing Date

Group Art Unit

(37 CFR §1.98(b))

September 8, 2003

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List of Patents and Publications for Applicant's Information Disclosure Statement				Applicant Rene Gantier, et al.				
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Applicant
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Examiner Signature Date Considered /Elly Gerald Stoica/ 03/15/2007 EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Substitute Form PTO (Modified)

U.S. Department of Commerce Patent and Trademark Office

Attorney's Docket No. Application No. 10/658,834 17109-012001/922

Information Disclosure Statement by Applicant (Use several sheets if necessary)

(37 CFR §1.98(b))

Applicant Rene Gantier et al. Group Art Unit Filing Date September 8, 2003 1631

			U.S. Pate	nt Documents			
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
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	AB	2004/0082026	4/29/2004	DeFrees et al.			
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Examiner Signature	/Elly Gerald Stoica/	Date Considered 03/15/2007				
	EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with					

	Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 17109-012001/922	Application No. 10/658,834	
	Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Rene Gantier et al.		
			Filing Date September 8, 2003	Group Art Unit 1631	

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Examiner Initial	Desig.	Document Number	Publication Date	Country or Patent Office	Class	Subclass	 lation No
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/EGS/	BI	"Interferon Gamma: Amarillo Biosciences, Inc. and Hayashibara Biochemical Laboratories Broaden Scope of Inteferon Gamma Agreement," PR News Wire, <a 10="" 18="" 2="" 2006),="" cgi-bin="" href="http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/06-15-2000/0001244415&EDATE=" http:="" pages.<="" stories.pl?acct='104&STORY=/www/story/06-15-2000/0001244415&EDATE="https://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/06-15-2000/0001244415&EDATE="https://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/06-15-2000/0001244415&EDATE="https://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/06-15-2000/0001244415&EDATE="https://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/06-15-2000/0001244415&EDATE="https://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/06-15-2000/0001244415&EDATE="https://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/06-15-2000/0001244415&EDATE="https://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/06-15-2000/0001244415&EDATE="https://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.pl.' td="" www.prnewswire.com="">			
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Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Rene Gantier et al.	
		Filing Date September 8, 2003	Group Art Unit 1631

		ocuments (include Author, Title, Date, and Place of Publication)
Examiner Initial	Desig. ID	Document
/EGS/	BS	Brod et al., "Oral administration of human or murine interferon alpha suppresses relapses and modifies adoptive transfer in experimental autoimmune encephalomyelitis," J Neuroimmunol 58(1):61-9 (1995)
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	CD	NCBI Protein AAA00949
	CE	NCBI Protein AAA52715
	CF	NCBI Protein AAA55468
	CG	NCBI Protein AAA55519
	СН	NCBI Protein AAA56191
	CI	NCBI Protein AAA75653
	Cl	NCBI Protein AAA94038
	СК	NCBI Protein AAB56781
	CL	NCBI Protein AAL01040
	СМ	NCBI Protein AAP20099
	CN	NCBI Protein AAR45816
\/	СО	NCBI Protein AAR47404
-	СР	NCBI Protein AAR47412
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(Other D	ocuments (include Author, Title, Date, and Place of Publication)
Examiner Initial	Desig. ID	Document
/EGS/	CQ	NCBI Protein AAW12828
1	CR	NCBI Protein CAA00410
	CS	NCBI Protein CAC88666
	СТ	NCBI Protein CAD29057
	CU	NCBI Protein CAI94176
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